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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,877	09/08/2000	Manabu Nohara	041465-5086	2565

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EXAMINER

MEW, KEVIN D

ART UNIT PAPER NUMBER

2664

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/658,877

Applicant(s)

NOHARA ET AL.

Examiner

Kevin Mew

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-4, 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Detailed Action

Response to Amendment

1. Applicant's arguments filed on March 8, 2005 regarding claims 1, 3-4, 6 have been considered and claims 1, 3-4, 6 are currently pending. Claims 2 and 5 have been canceled by the applicant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 3-4, 6** are rejected under 35 U.S.C. 102(b) as being anticipated by Higuchi et al. (EP 0,825,737 A1).

Regarding claims 1 & 4, Higuchi discloses a communicating apparatus (see Fig. 7) and a communicating method for performing an asynchronous communication with a base station (see Fig. 12), comprising:

a long code synchronized phase detector and a long code synchronized phase detection process (**a receiving device and a receiving process**, see element 80, Fig. 19A) for receiving a spread modulation input signal (**a receiving device and a receiving process for receiving a down link signal, which is transmitted from the base station**) in which a long code (**a division signal, see hatched portion in the received signal**, see Fig. 15) is inserted for each of long code period (**for each of constant time intervals**, see Fig. 15);

a long code synchronized phase detector and a long code synchronized phase detection process (**a detecting device and a detecting process**, see element 80, Fig. 19A) for performing correlation detection between a received spread modulation signal and the spreading code for spreading the received spread modulation signal, and deciding whether the long code (division signal) synchronization has been established or not by determining the maximum correlation power obtained as a result of the addition for each long code (**detecting division signals out of received down link signal, in phase to the constant time intervals**, see col. 6, lines 4-24 and col. 26, lines 5-21);

an adder and an adding process for adding correlations (**an adding device and an adding process for adding detected division signals**, see col. 26, lines 5-21 and element 59, Fig. 19B) based on the long code synchronized phase detection (**with matching phases for each of the constant time intervals**, see col. 25, lines 48-51) over a period that is the sum of each long code periods considered (**over a predetermined time duration, which is longer than the constant time intervals**, see col. 26, lines 19-21); and

a memory means and a storing process (see element 70, Fig. 22) for storing resultant correlation sums and timings (**a memory device and a storing process for storing accumulated additional values generated by said adding device**, see col. 27, lines 27-28), and after completing the detection at all timings (**over the predetermined time duration**), a maximum correlation value selector selects the maximum correlation sum and its timing which is made the synchronized timing (**perform synchronization capturing with the base station on the basis of the accumulated additional values added over the predetermined time duration**, see col. 27, lines 27-32).

Higuchi also discloses that the mobile station detects the correlation between (**calculates a correlation between**) the received signal (**down link signal**) and a code obtained by multiplying the long code (**division signal**) and short code (**a signal correlated with the division signal**) for each of a plurality of predetermined time intervals (**for each of a plurality of predetermined time intervals**, see col. 34, lines 54-60 and col. 35, lines 1-24, col. 31, lines 8-33), in order to identify the types of the received long code and the maximum correlation value of the long code (**detects the division signal out of the received down link signal**, see lines 26-45, col. 14). Higuchi further discloses a threshold value decision is made to determine that the received long code is the spreading code if the maximum correlation value for each of the predetermined time intervals exceeds the threshold value (**when the calculated correlation calculated for each of the predetermined time intervals exceeds a predetermined threshold value**, see lines 46-58, col. 14 and lines 1-14, col. 15, and Fig. 9, and col. 34, lines 54-60 and col. 35, lines 1-24, col. 31, lines 8-33).

Regarding claims 3 & 6, Higuchi discloses a memory means and a storing process (**a memory device and a storing process**, see element 70, Fig. 22) for storing correlation sums and the respective timings (see col. 27, lines 27-28). Although Higuchi does not explicitly show the memory means comprises a plurality of memory areas, it is well known that a memory has a plurality of memory locations. Furthermore, it is inherent that each of the respective correlation sums would be stored in a separate memory location in the memory means before long code synchronization capturing is performed by the threshold value decision means (**memory device has a plurality of memory areas to store accumulated additional values with packing each**

of the accumulated additional values in respective one of the memory areas, see element 48, Fig. 22).

Response to Arguments

3. Applicant's arguments filed on 5/17/2004 have been fully considered but they are not persuasive.

With respect to the arguments made by the Applicant on page 5, lines 16-18 regarding "Higuchi merely decides a threshold value for the maximum correlation value," it is noted by the Examiner that these arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claim patentably distinguishes them from the references.

In response to applicant's argument that the Higuchi reference fails to show certain features of applicant's invention, it is noted that by the Examiner that the features upon which applicant relies (i.e., "a detecting device calculates a correlation between a signal correlated with the division signal and the received downlink signal for each of a plurality of predetermined time intervals" on page 6, lines 2-4) are indeed taught by Higuchi. In particular, Higuchi discloses that the mobile station detects the correlation between (**calculates a correlation between**) the received signal (**down link signal**) and a code obtained by multiplying the long code (**division signal**) and short code (**a signal correlated with the division signal**) in order to identify the types of the received long code and the maximum correlation value of the long code (**detects the division signal out of the received down link signal**, see lines 26-45, col. 14) for each of a

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plurality of predetermined time intervals (**for each of a plurality of predetermined time intervals**, see col. 34, lines 54-60 and col. 35, lines 1-24, col. 31, lines 8-33).

Therefore, the Examiner respectfully disagrees with the applicant's argument that the Higuchi reference fails to teach the aforementioned limitations as described in claims 1, 4 based upon the Examiner's argument discussed in the previous paragraph. In light of the Higuchi's teaching, claims 1 and 4 thus remain rejected as being unpatentable over Higuchi set forth in the USC 102(b) rejection of claim 1 above. Furthermore, claims 3 and 6, which depend on claims 1 and 4, respectively, would also remain unpatentable over Higuchi by the same ground of rejection set forth in the previous Office Action.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Wellington Chin', with a long horizontal line extending to the right.

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER